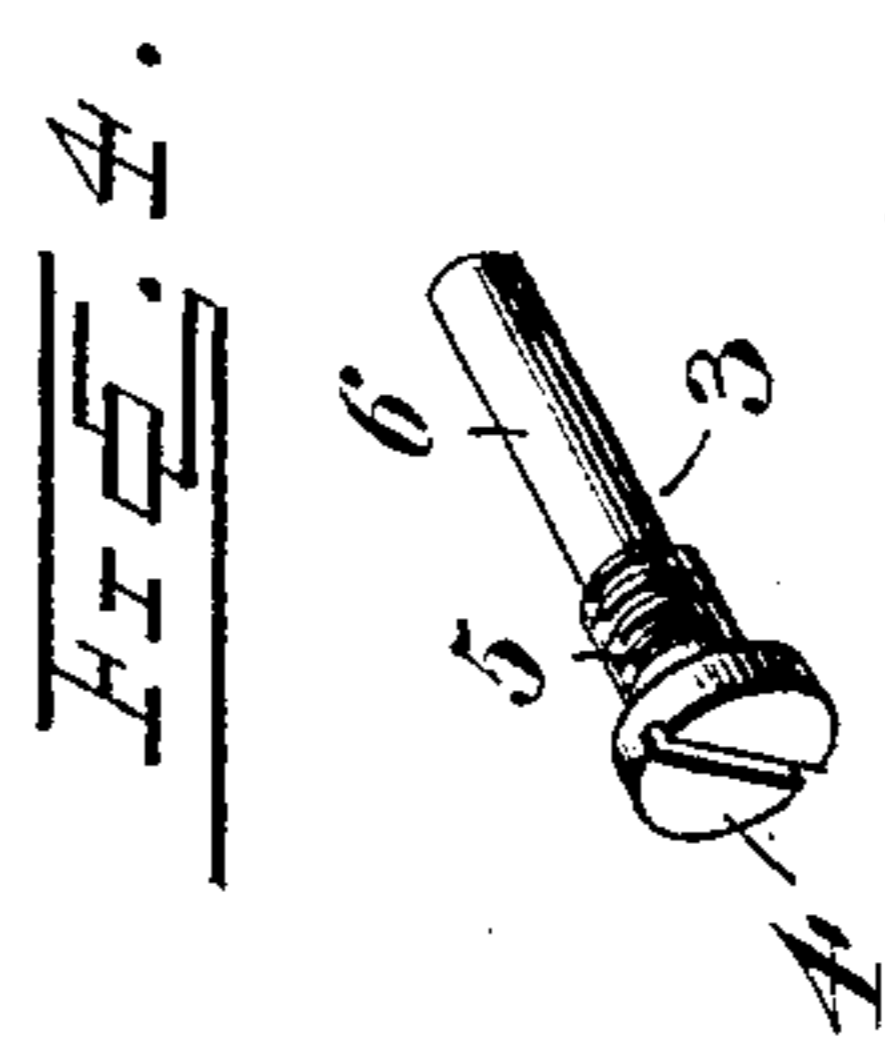
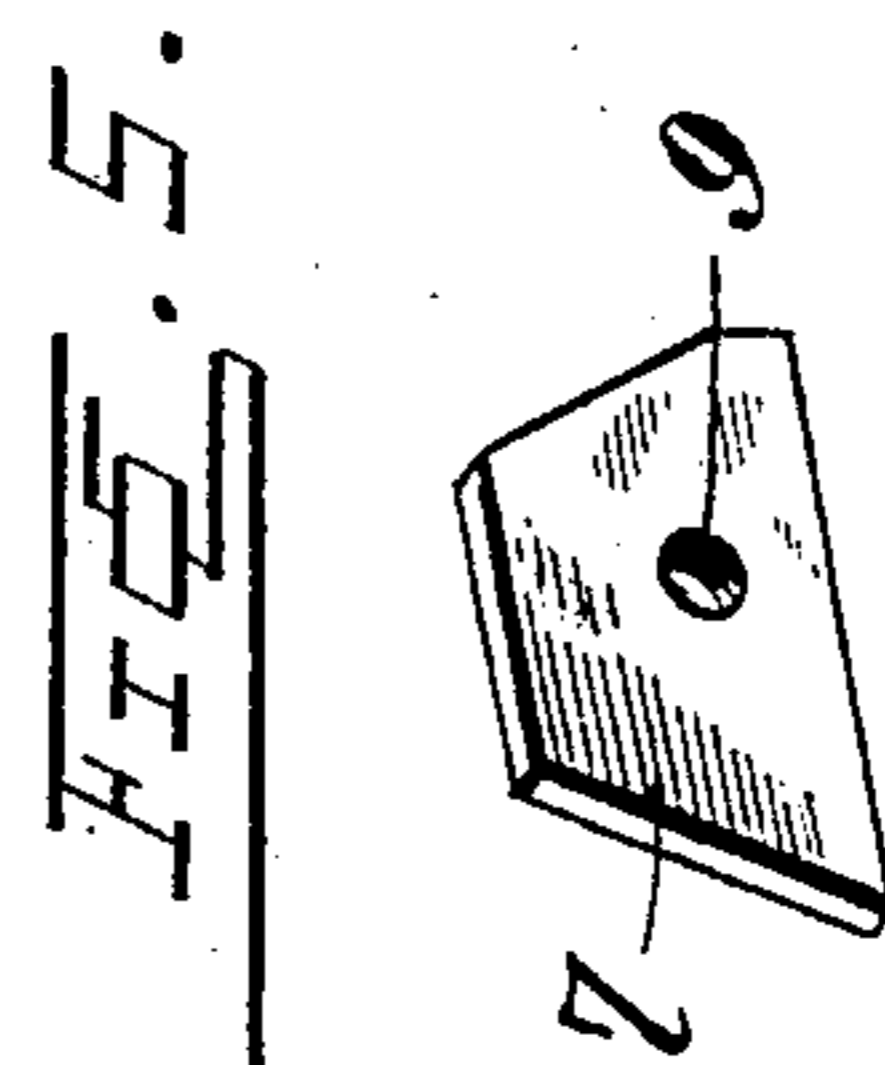
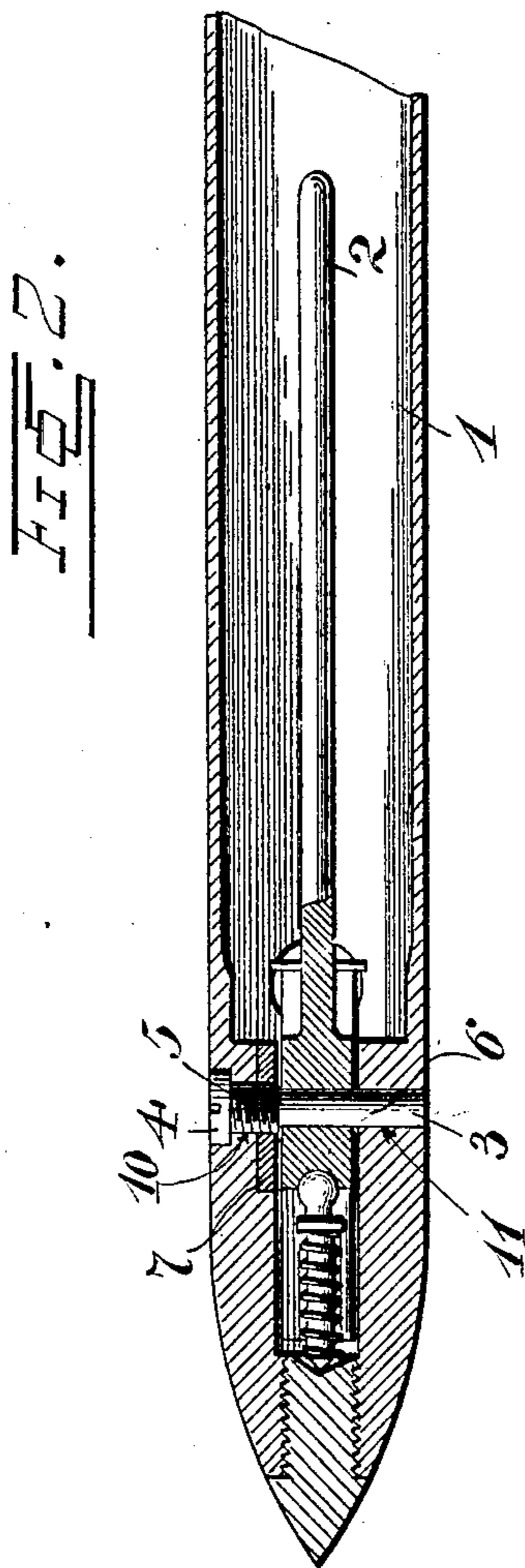
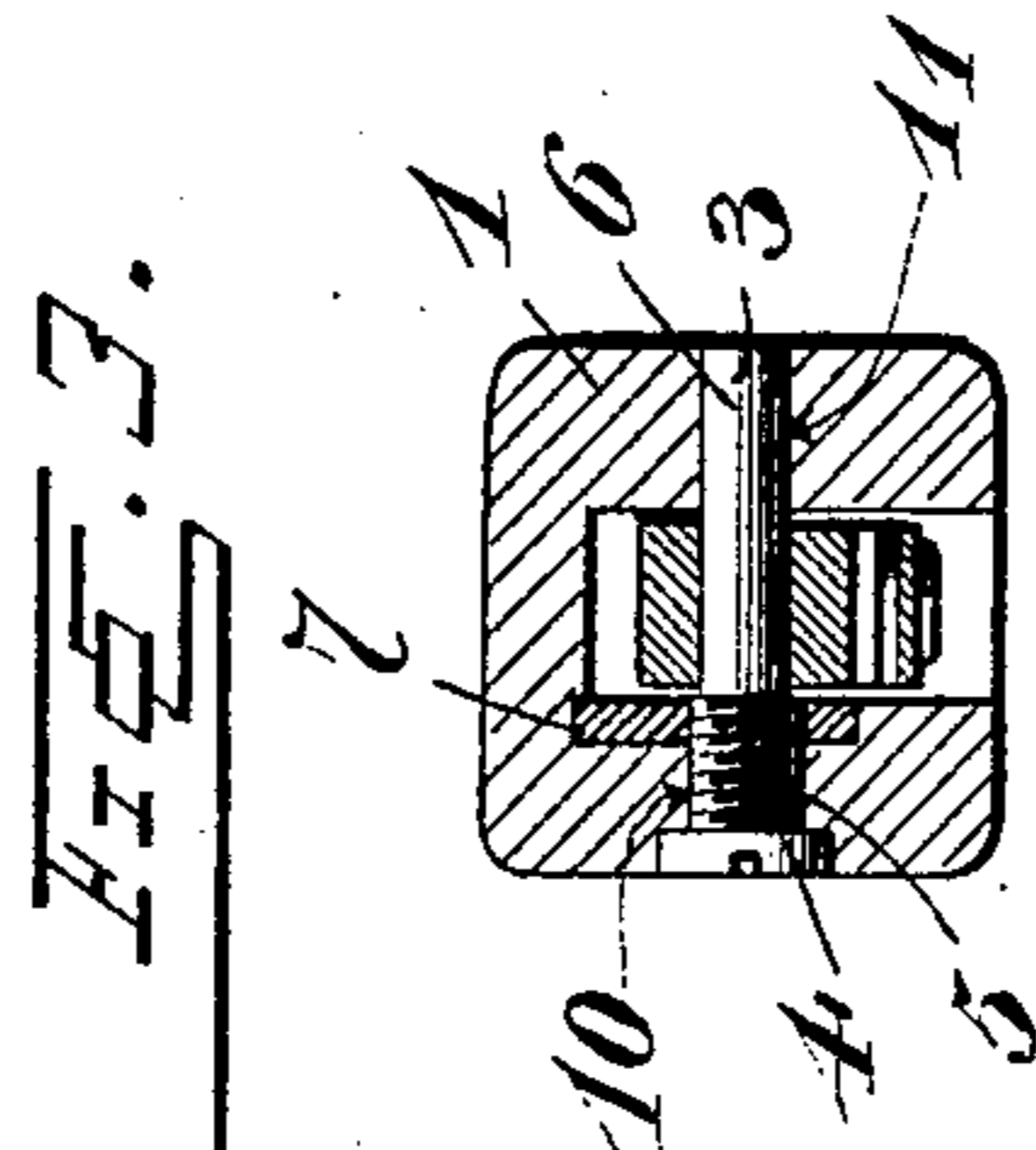
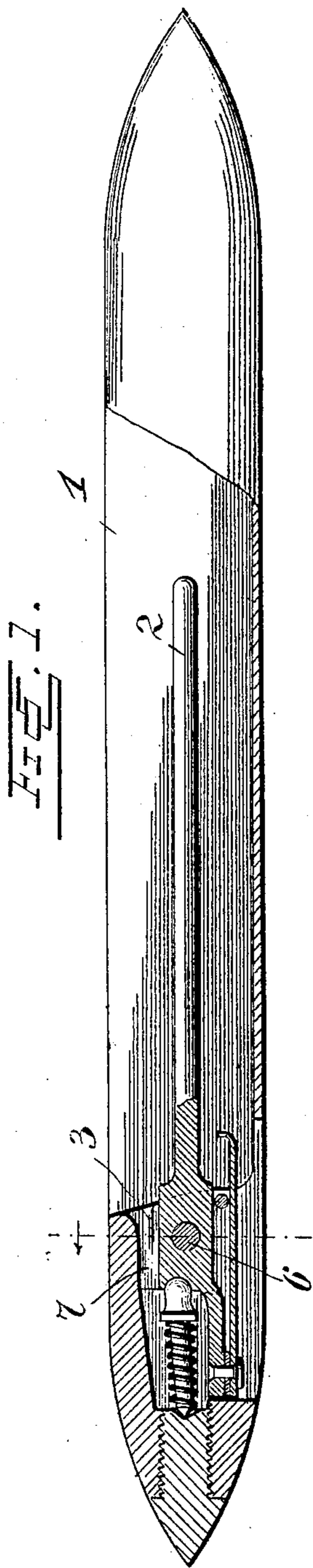


No. 808,885.

PATENTED JAN. 2, 1906.

C. F. THOMPSON.
PIVOT BOLT FOR LOOM SHUTTLE SPINDLES.
APPLICATION FILED SEPT. 26, 1904.



Witnesses
C. Muntz
P. H. Girschauer.

Inventor
Charles F. Thompson
by *A. B. Wilson*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES F. THOMPSON, OF OSWEGO FALLS, NEW YORK.

PIVOT-BOLT FOR LOOM-SHUTTLE SPINDLES.

No. 808,885.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed September 26, 1904. Serial No. 225,999.

To all whom it may concern:

Be it known that I, CHARLES F. THOMPSON, a citizen of the United States, residing at Oswego Falls, in the county of Oswego and State of New York, have invented certain new and useful Improvements in Pivot-Bolts for Loom-Shuttle Spindles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to pivot-bolts for loom-shuttle spindles.

The object of the invention is to provide a pivot-bolt for the spindles of loom-shuttles and means whereby said pivot-bolts are prevented from casually slipping out of place.

A further object is to provide a pivot-bolt and lock of this character which will be simple, durable, and inexpensive in construction and which may be readily applied to shuttles now in use.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a central longitudinal vertical sectional view of a shuttle having applied thereto my improved pivot-bolt. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a transverse vertical sectional view on the line of the pivot-bolt. Fig. 4 is a detail perspective view of the pivot-bolt removed from the shuttle. Fig. 5 is a similar view of the plate or nut into which said bolt is screwed.

Referring more particularly to the drawings, 1 denotes a loom-shuttle which is of the usual construction and in which is pivotally mounted a spindle 2, adapted to receive a bobbin. (Not shown.) 3 denotes the bolt by which said spindle is pivotally connected to the shuttle. The bolt 3 has formed on one end a head 4, provided with a slot for reception of a screw-driver. On the bolt adjacent to the head 4 is formed a short threaded portion 5, beyond which is formed a reduced smooth cylindrical portion 6, upon which the spindle 2 is pivotally mounted. In the end shuttle, in which is disposed the pivoted end of the spindle, is seated a nut-plate 7, in which is formed a threaded aperture 9, which aligns with smooth-bored aper-

tures 10 and 11, formed in the side walls of the shuttle.

In assembling the parts the nut-plate is inserted in place in the end of the shuttle, which is recessed to form a seat for the same. The spindle is now inserted in place in the shuttle, with the eye of the same in alinement with the apertures in the shuttle and nut-plate. The pivot-bolt is now inserted in the openings in said shuttle and plate and through the eye in said spindle until the threaded portion of the same comes into engagement with the threaded aperture of the nut-plate, when the bolt is turned and the said threaded portion screwed into said aperture until the end 4 is pressed tightly against the bottom of the countersink in the outer side of the shuttle, thereby causing the bolt to tightly clamp the plate in place, the friction between the head of the bolt and the shuttle and between the thread of the bolt and the opening in the plate being such as to firmly hold said bolt in place and prevent the same from dropping out, which frequently occurs in shuttles having the usual form of pivot-bolt, thus causing considerable trouble, loss of time, and often occasioning considerable damage.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A loom-shuttle having a recess in one end, a plate gained in one wall of the said recess and provided with a screw-threaded opening, the said wall of the said recess of the shuttle having an unthreaded opening coincident with the threaded opening in the plate and further provided with a countersink at the outer end of the said unthreaded opening, the opposite wall of the shuttle having an unthreaded opening of reduced diameter, in combination with a spindle having its pivotal end in said recess and provided with an unthreaded opening registering with the unthreaded opening of reduced diameter in one

wall of the shuttle, and a bolt having an un-
threaded stem portion in the unthreaded
opening of the spindle and one wall of the
shuttle, a screw-threaded portion of enlarged
5 diameter in the screw-threaded opening of
the plate and in the unthreaded opening of
the shuttle-wall contiguous to said plate,
said bolt being further provided with an en-
larged head in the said countersink of the
10 shuttle, and serving to firmly clamp the plate

in place, the latter serving to lock the bolt,
for the purpose set forth substantially as de-
scribed.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit- 15
nesses.

CHARLES F. THOMPSON.

Witnesses:

W. J. HARTNETT,
FRANK CULKIN.